Schram (R.) Ueber das Stundenzonen-System der Amerikanischen Eisenbahnen. 8vo. *Wien* 1890; La Zona Oraria dell' Adriatico. 12mo. *Trieste* 1890; Ausländische Stimmen über die Adria-Zeit. 8vo. *Wien* 1890; The Actual State of the Standard Time Question. 8vo. [*London*] 1890.
The Author.

Serguéyeff (S.) Le Sommeil et le Système Nerveux. Physiologie de la Veille et du Sommeil. Tomes I–II. 8vo. *Paris* 1890.
The Author.

Wolf (R.) Astronomische Mittheilungen. December, 1880. 8vo. [*Zürich.*]
The Author.

Portrait Medals in bronze of P. J. van Beneden and F. Tiedemann.
Sir James Paget, Bart., F.R.S.

A series of Photographic Studies of the Normal Solar Spectrum.
Mr. George Higgs.

May 28, 1891.

Sir WILLIAM THOMSON, D.C.L., LL.D., President, in the Chair.

The Presents received were laid on the table, and thanks ordered for them.

The Rev. A. M. Norman (elected June 5, 1890), was admitted into the Society.

The following Papers were read:—

I. "On the Bases (Organic) in the Juice of Flesh. Part I." By GEORGE STILLINGFLEET JOHNSON, M.R.C.S., F.C.S., F.I.C. Communicated by Professor G. JOHNSON, F.R.S. Received April 28, 1891.

(Abstract.)

The author has endeavoured to ascertain by careful experiments how far the substances hitherto prepared from flesh are true "*educts*," and really present in the flesh itself, or merely products, due to (1) the action of chemical or physical agencies applied in the course of extraction, or (2) to bacterial action modifying the composition of the flesh before it comes into the hands of the operator.

Preliminary experiments are first described bearing chiefly upon the first-named source of error.

Liebig's process for extracting kreatine from the juice of flesh was modified by omitting the use of baryta-water, with the result that abundance of kreatine was obtained, mixed with acid potassium phosphate (KH_2PO_4). In Liebig's process potassium chloride is obtained after the kreatine has been separated.

A preliminary experiment is then described in which the author precipitated the albuminoid matters from the watery extract of fresh butcher's beef by means of solution of mercuric chloride, the filtrate depositing on standing a spherical precipitate, consisting of the mercury salt of the sarcous kreatinin, from which a tabular kreatinin was obtained isomorphous with the tabular kreatinin obtained by the author from human urine in 1887.

The special advantages of the method adopted by the author in isolating the kreatinin of urine are next detailed, after which a series of experiments are described in which muscle substance in different stages of freshness was extracted with water, the extracts treated by the mercuric chloride method, and the products compared.

Among these products is sarcous kreatinin, whose properties are fully described and carefully compared with those of urinary kreatinins previously investigated (*vide* 'Roy. Soc. Proc.,' vol. 43, pp. 493–534).

The final conclusion drawn is that sarcous kreatine is not present in fresh muscle, but results from bacterial action, whereas sarcous kreatinin is probably a true "educt."

II. "Note on Dr. Fenton Evans' Paper on the Pathogenic Fungus of Malaria." By W. T. Thiselton Dyer, M.A., C.M.G., F.R.S. Received May 12, 1891.

The abstract of this paper published in this volume of the 'Proceedings' contains (p. 200) the following statement: "Alteration in the chemical composition of the nutrient medium . . . elicited the interesting fact that, under these circumstances, the organism can pass to a more highly developed state, displaying the structure and fructification of a highly organised fungus, but differing in certain important features from any fungus hitherto described."

This statement will remain on record, and can hardly fail to cause some perplexity to future students of the ætiology of malaria. I was present at the reading of the paper. The fungus exhibited was undoubtedly "highly organised." It was in point of fact a typical *Mucor*, and my friend Professor Marshall Ward, who was also present, was disposed to regard it as identical with the form known